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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/692,563

10/24/2003

Michael Draper

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9127

959 7590 09/05/2008
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EXAMINER

QAZI, SABIHA NAIM

ART UNIT

PAPER NUMBER

1612

MAIL DATE

DELIVERY MODE

09/05/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/692,563

Applicant(s)

DRAPER ET AL.

Examiner

Sabiha Qazi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84, 85 and 87 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 are pending.

Election/Restrictions

I. Restriction to one of the following inventions is required under 35

U.S.C. 121:

- I. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents furanyl or benzofuranyl group.
- II. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents imidazolyl, group.
- III. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents benzothiophenyl, group.
- IV. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents quinolinyl or isoquinolinyl group.

- V. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents pyridinyl group.
- VI. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents pyrazolyl group.
- VII. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents benzodioxazolyl group.
- VIII. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents naphthridinyl group.
- IX. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents methylenedioxyphenyl group.
- X. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents pyrimidyl group

- XI. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents purinyl group
- XII. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents methylenedioxyphenyl group
- XIII. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents oxazolyl, isooxazolyl group.
- XIV. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents thiazolyl or isothiazolyl group.
- XV. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents oxazolyl, isooxazolyl group.
- XVI. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents deazapurinyl group.

XVII. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents indolyl group.

XVIII. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents phenyl group.

XIX. Claims, 1, 3-5, 29-36, 42-45, 48-62, 66-82, 84-85 and 87 drawn to compound and compositions when Aryl represents any other group not included in any of the above group in the definition of R9.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I-XIX is unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions the inventions have different modes of operations and different effects.

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3. Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

R9 represents aryl group which includes large number of heterocyclic groups, aryl group such as substituted or unsubstituted phenyl or a heteroaryl moieties. See page 9 last paragraph where the examples of malaria interacting moieties include aryl groups such as phenyl and

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heteroaryl groups (e.g., furanyl, imidazolyl, benzothiophenyl, benzofuranyl, quinoliny, isoquinoliny, pyridiny, pyrazolyl, benzodioxazolyl, benzoxazolyl, benzothiazolyl, benzoimidazolyl, methylenedioxyphenyl, indolyl, thienyl, pyrimidyl, pyrazinyl, purinyl, pyrazolyl, oxazolyl, isooxazolyl, naphthridinyl, thiazolyl, isothiazolyl, and deazapurinyl). The aryl group may be substituted or unsubstituted. Examples of

See page 10, lines 1-5 substituents include, but are not limited, alkyl, alkenyl, alkynyl, aralkyl, alkoxyalkyl, aminoalkyl, amino, nitro, cyano, halogen (e.g., fluorine, chlorine, bromine, iodine, etc.), hydroxy, thiol, formyl, acetyl, acyl, alkoxy (e.g., methylene dioxy, methoxy, ethoxy, propoxy, etc.) and heterocyclic (e.g., morpholino, piperazine, etc.). The substituents

Each hetero group is drawn to a separate invention which is art recognized different subject matter. One hetero group is not obvious to the other. Each of them is drawn to a separate patent.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even

though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected invention. Applicant is further requested to elect a species from the elected group for search purposes.**

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the

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evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Due to the complexity of the invention no call is being made for the restriction requirement. Upon further review and consideration it was decided to restrict further for complete and thorough examination. Claims previously were very broad and it was almost impossible to search completely. Previous action is withdrawn due to the new restrictions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sabiha Qazi whose telephone number is (571) 272-0622. The examiner can normally be reached on any business day except Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Krass Frederick can be reached on (571) 272-0580.

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The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sabiha Qazi/

Primary Examiner, Art Unit 1612

